

Supporting information

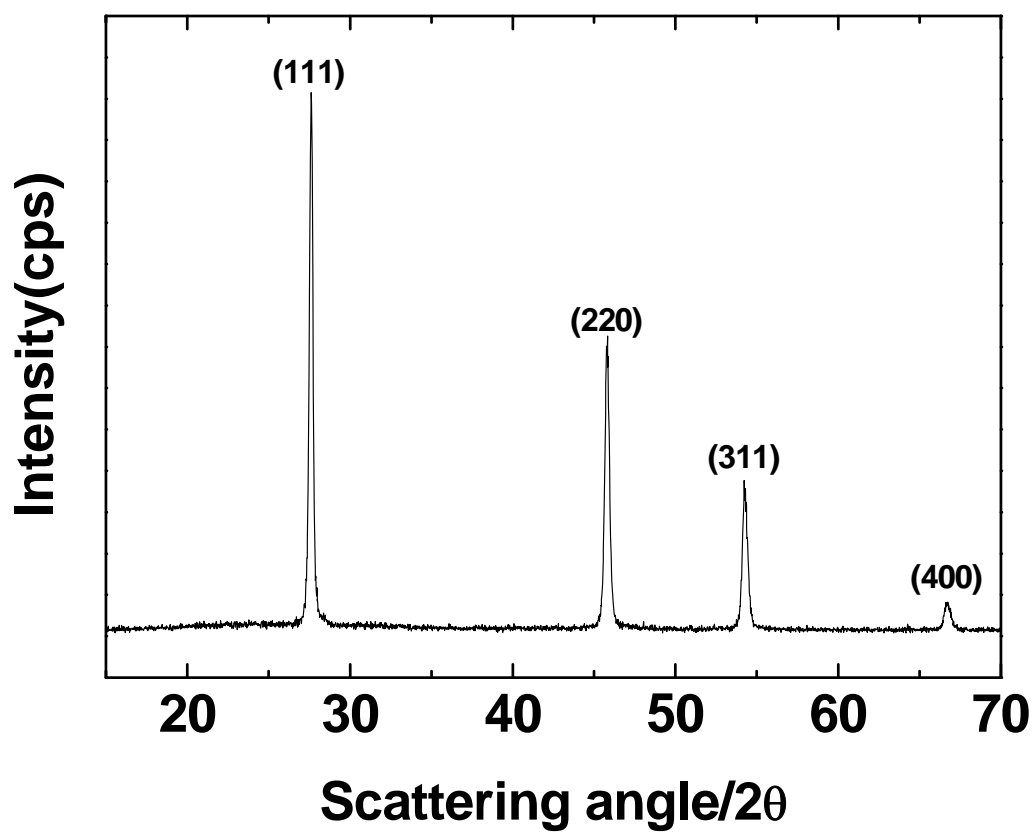
High performance Ge Nanowire Anode sheathed with Carbon for Lithium Rechargeable Batteries

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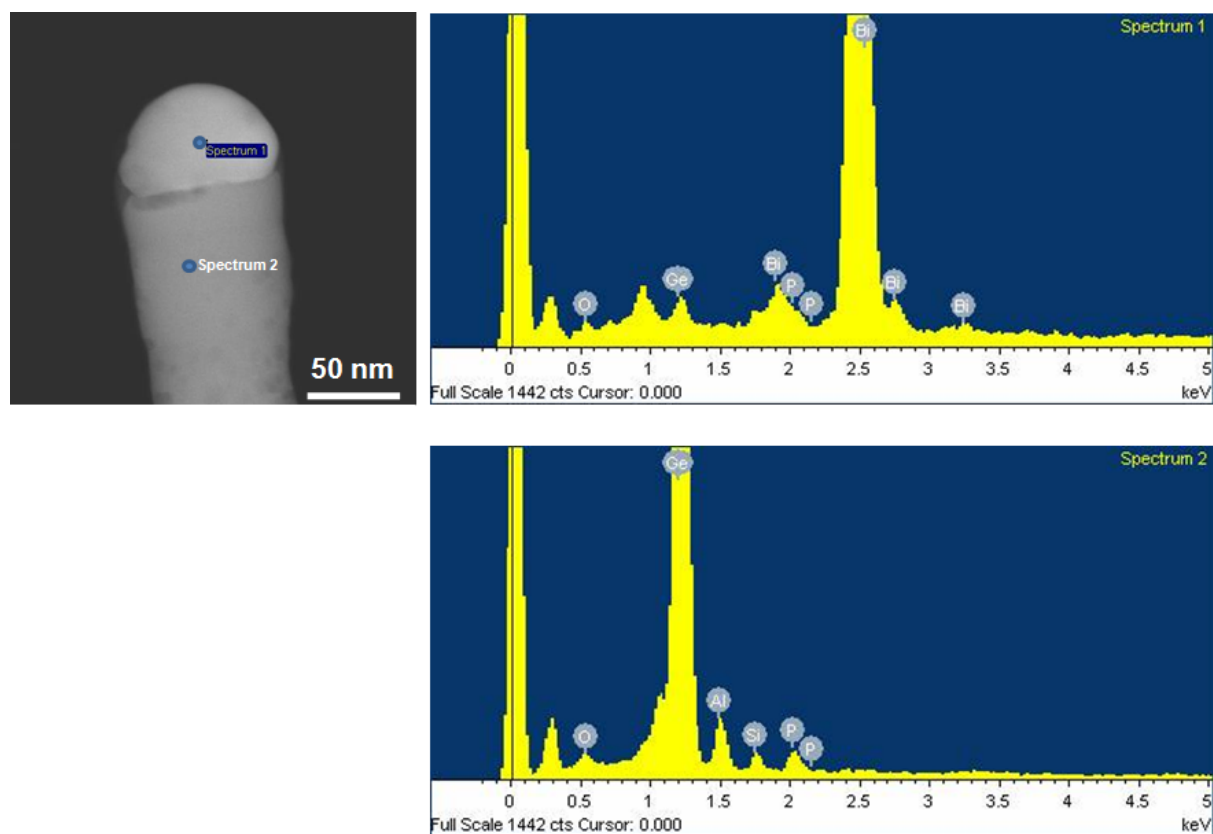
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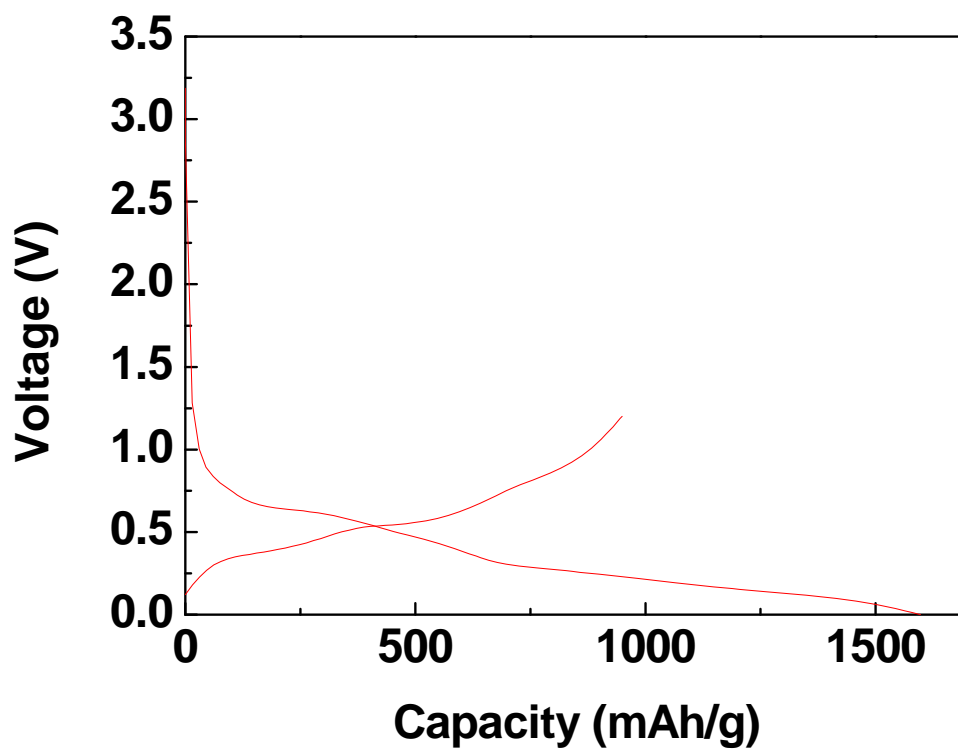
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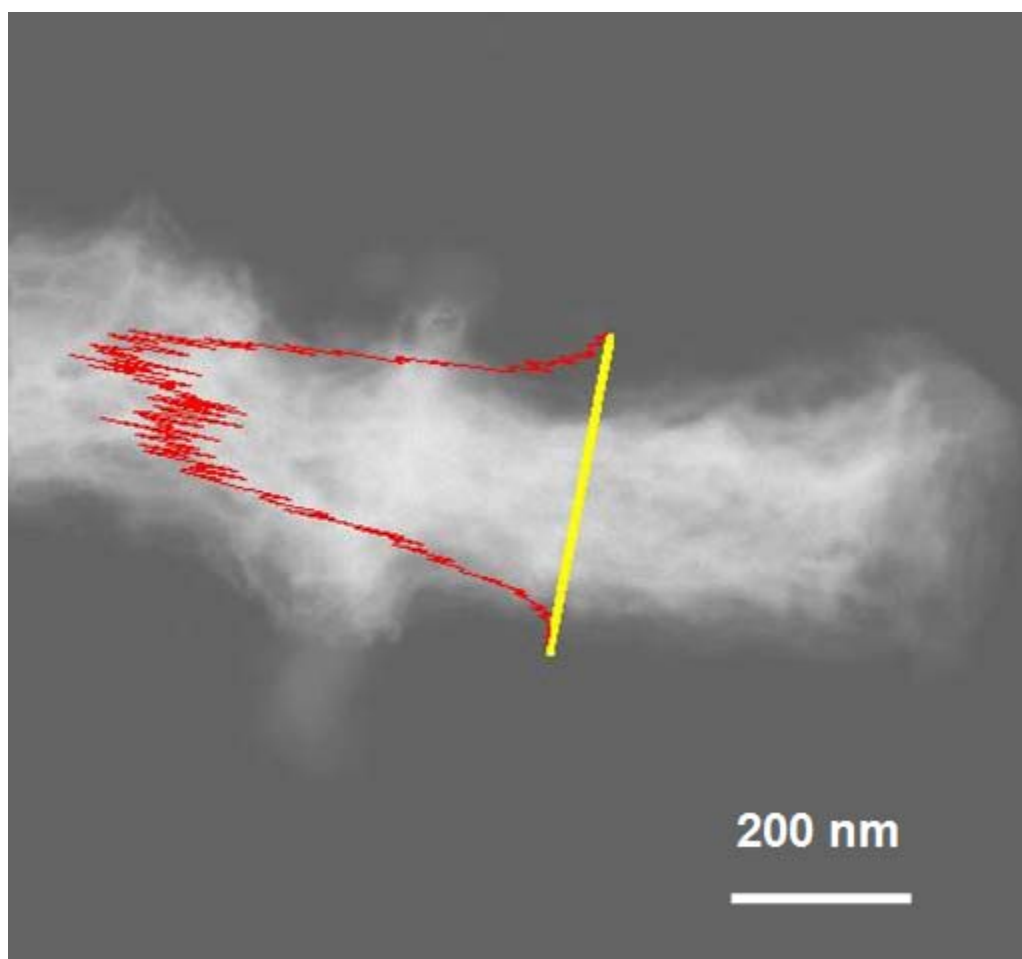
S1. XRD pattern of Ge NW sheathed with carbon.



S2. TEM image of Ge-NW (left) and Energy dispersive X-ray spectroscopy of GE-NW at spectrum 1 and spectrum 2 (right).



S3. Voltage profiles of uncoated Ge-NW during the first cycle in a coin-type half cell at 21°C. C rate was 0.5C.



S4. TEM image of c-NW after 100 cycles and line mapping of Ge along the yellow line.